IN THE SPECIFICATION:

Please amend the specification as follows:

Paragraph beginning on page 6, at prenumbered line 29, has been amended as follows:

[0019] One thing is worthy of attention, i.e. a downwardly ~~cutting~~ cut portion 328 is further arranged at lower end of the curve surface 326, and a projection surface 325 is also further arranged on a tooth valley bottom edge between the first characteristic tooth 321 and the second characteristic tooth 322, these two structures play very important rolls on the present invention and will be described later. The ~~cutting~~ cut portion 328 is located between the curve surface 326 and the top edge 3252 of the projection surface 325. The projection surface 325 is projecting out toward the smaller sprocket by using partial materials when the large sprocket 3 is formed by stamping, and the curvature design of the top edge 3252 of the projection surface 325 is formed in accordance with the bottom edge profile of the chain plate of the chain 4 shifting-up path and in match with the design of the shifting-up angle. The upper and lower dies of the projection surface are designed as a smaller one and a large one by the stamping formation, and the top edge 3252 of the projection surface 325 is stamped and formed into a slant angle 3251, which can be shown and referred in Fig. 3. Additionally, at the side where the second characteristic tooth 322 is toward the third characteristic tooth 323 (i.e. the non-force-acting side where the second characteristic tooth of the sprocket 3 drives the chain to rotate), a recessed tooth valley 327 structure is formed by deeply cutting in a predetermined curvature and depth, while the force-acting side of the third characteristic tooth 323 (left side of the figure) is then kept with the original tooth arc curing line, and its function will be described in detail later.

Paragraph beginning on page 7, at prenumbered line 18, has been amended as follows:

[0020] Please refer to Fig. 5 and Fig. 6, wherein the Fig. 6 is a chaining-up embodiment illustration when the tooth contour structure for large sprocket set of bicycle of the present invention is in its first chain shifting-up path, and Fig. 6 is a

partially enlarged view for the portion of the second tooth group in Fig. 5. In here, the so-called first chain shifting-up path is referred to when the chain 4 are chained-up (shifted-up) from the smaller sprocket 2 to larger sprocket 3, the first chain pitch 41 of the chain 4 is a wide chain pitch, and the position of outer chain plate of wide chain pitch (the first chain pitch 41) is just located at the position of the projection surface 325. At this time, the recession 324 may facilitate the left side head end of the outer chain plate of the first chain pitch 41 to be further biased toward the larger sprocket 3 and an interference phenomenon won't be happened, and it is also found from the figure that the bottom edge of the recession 324 is extended along the shifting-up direction of the chain 4. Thereby, the outer chain plate of the first chain pitch 41 may be effectively biased toward the larger sprocket 3 and therefore be butted against by the top edge 3252 of the projection surface 325. At this time, since the ~~cutting~~ cut portion 328 is arranged at the lower end of the curve surface 326 and the left side end of the projection surface 325, so the lower end of the outer chain plate for the first chain pitch 41 may be firmly biased toward and butted against the top edge 3252 of the ~~butting against~~ projection surface ~~3252~~ 325 and completely without the worrisome of interference. Furthermore, since the curvature of the top edge 3252 for the projection surface 325 is designed in accordance with the curvature of the bottom edge of the outer chain plate for the chain pitch 41 near its central portion profile and in match with the shifting-up angle (i.e. the contact between the chain pitch 41 and top edge 3252 is "surface" contact and is not "point" contact). And additionally the top edge 3252 is shown as a state of a slant angle 3251, so it will facilitate that as soon as the first chain pitch 41 is held against by the butting against surface 325, afterward when no matter how large is the load put on the chain 4, it all completely won't happen the phenomenon of loosening off. And, the curvature of the top edge 3252 for the projection surface 325 may further guide the shifting-up direction of the chain 4 effectively to make the second chain pitch 42 (which is a narrow chain pitch) be biased toward and butted against the surface of the second characteristic tooth 322, but still not set onto the second characteristic tooth 322 yet. Until the next wide chain pitch, i.e. the third chain pitch 43, then it will be accurately st into (or engaged with) the third characteristic tooth 323 to complete the shifting-up motion for the

chain 4. From here we know that by the design for the position of the projection surface 325 and the curvature of the top edge 3252, the chain 4 may be guided and appropriately adjusted with accurate pitch to set onto the larger sprocket 3 to increase the probability and efficiency for successful shifting. Further, by the design of a recessed tooth valley 327 for the present invention, not only the left side end head (not numbered) won't be interfered with the second characteristic tooth 322, but also the third chain pitch 43 is made to be able to have a little tolerance of action to proceed some pitch adjustment for making the third chain pitch 43 be easily set onto the third characteristic tooth 323.

Paragraph beginning on page 8, at prenumbered line 30, has been amended as follows:

[0021] Please refer to Fig. 7, which is an embodiment illustration for the present invention in the chain shifting-up path of the second kind. Here, the so-called chain shifting-up path of the second kind is referred to all the chain pitches of Fig. 6 that move in parallel with a chain pitch, therefore, the chain pitch that is located at the projection surface 325 will be a narrow chain pitch instead of a wide chain pitch. As shown in the figure, the right side head end of the first chain pitch 41 may be biased toward the larger sprocket 3 and without generating interference because of the arrangement of the recession 324. The second chain pitch 42 (narrow chain pitch) is just located at the position of the projection surface 325 and is difficult to be firmly held against by the top edge 3252 because the second chain pitch 42 is a narrow chain pitch. Relatively, since the third chain pitch 42 is a wide chain pitch, so the left side head end (not numbered) of the outer chain plate may be held against by the right half portion of the top edge 3252 to facilitate the third chain pitch 43 (wide chain pitch) to be directly set into (engaged with) the second characteristic tooth 322 (more early one tooth than the embodiment of the Fig. 6) to complete the motion of shifting-up. Since the chain holding against position in the second chain shifting-up path and the tooth position for completing the setting-into motion are all different to the chain shifting-up path of the second kind, so the design of chaining-up path and pitch for the chain is made to be different. Firstly, the curving circular measure of the curve surface 326 designed in the right side of

the first characteristic tooth 321 is designed in accordance with the moving curves when the left side head end of the outer chain plate for the third chain pitch 43 are butted against the top edge 3252 of the projection surface 325 from the top to the bottom, and further in match with the ~~cutting~~ cut portion 328 of its lower end, the left side head end of the outer chain plate for the third chain pitch 43 won't have the interference phenomenon. The pitch change makes the left side head end of the outer chain plate for the third chain pitch 43 may be held against by the top edge 3252 of the projection surface 325, and the structure of the recessed tooth valley 327 in the right side of the second characteristic tooth 322 again develops some function for adjusting the pitch to make the third chain pitch 43 be more easily set into (engaged with) the second characteristic tooth 322.

Paragraph beginning on page 9, at prenumbered line 34, has been amended as follows:

[0023] Please refer to Fig. 8, which is another preferable embodiment for the tooth contour structure for large sprocket set of bicycle of the present invention. The embodiment in Fig. 8 is substantially same as the aforementioned embodiment, i.e. a first characteristic tooth 321a, a second characteristic tooth 322a, and a third characteristic tooth 323 are arranged in sequence on the large sprocket 3a along the chain's shifting-up direction (i.e. reversing to the rotation direction of the sprocket). The right side and lower portion of the first characteristic tooth 321a are also individually arranged with a curve surface 326 and a recession 324. The tooth valley bottom edge between the first and second characteristic tooth similarly has a projection surface 325 formed by stamping. The left side of the projection surface 325 and the lower end of the curve surface 326 similarly has a ~~cutting~~ cut portion 328. The right side tooth contour of the second characteristic tooth has been similarly possessed with a recessed tooth ~~volley~~ valley 327. The difference is that the tooth tops of the first characteristic tooth 321a and (or) the second characteristic tooth 322a may but cut off with a predetermined height to become a shorter short tooth. The shorter first and (or) the second characteristic tooth 321a, 322a may help to avoid the generation of interference during chain's shifting-up. For example, when the chain is chained-up as in aforementioned shifting-up path of second kind,

the third chain pitch (wide chain pitch, not shown in this figure) will be directly set into the second characteristic tooth 322 since during the procedure that the left end head of the outer chain plate for the third chain pitch is held against the right side end of the projection surface 325 in moving from the top to the bottom (actually it is the rotation of the sprockets), although the curve surface 326 in the right side of the first characteristic tooth 321 has the function for avoiding the left end head of the external chain plate for the third chain pitch from interfering with the first characteristic tooth 321, but in order to void the abrupt occurrence of phenomenon of load change or swing for the chain during the shifting procedure and the third chain pitch is caused to be interference with the tooth top of the first characteristic tooth. Therefore, in this preferable embodiment, the first characteristic tooth 321a is specially designed as a shorter short tooth to avoid the occurrence of aforementioned situations.

Paragraph beginning on page 10, at prenumbered line 33, has been amended as follows:

[0024] From the structure characteristics of the aforementioned embodiments of the present invention, the tooth contour structure for large sprocket set of bicycle of the present invention applies the design of three characteristic tooth 321, 322, 323 formed by the manufacturing procedure of stamping, and in match with the structure features of projection surface 325, recession 324, ~~cutting~~ cut portion 328, and recessed tooth valley 327, etc. has following several advantages:

Paragraph beginning on page 11, at prenumbered line 23, has been amended as follows:

[0026] 2. The ~~cutting~~ cut portion 328 of the present invention is located between the left end of the projection surface 325 and the lower side of the curve surface 326. It is not a recessive surface formed by forging, but is formed by cutting together with the cutting procedure for the tooth contour, so additional manufacturing procedure is not needed and the cost is lowered, and this structure characteristic is one emphasis of the present invention. Because the ~~cutting~~ cut portion 328 is just located at the left end of the projection surface 325, when in the

shifting-up path of the first kind (as shown in Fig. 6), the outer chain plate of the chain may be biased accurately against the upper portion of the projection surface 325 at the position of the ~~cutting~~ cut portion 328 and be held against thereof. If the position is formed into the recessed surface by forging instead of cutting, then not only additional forging procedure is needed and the cost of die equipment is higher, but also additional continuous tooth contour correction and thermal-treatment procedures are further needed, and while the outer chain plate of the chain can not be biased and swung accurately onto the middle upper portion of the ~~cutting~~ cut portion 328 and can not be held against thereof. In the same theory, in the present invention, the projection surface 325 is located at the tooth valley profile instead of the positions of tooth top or the further lower portion of the tooth valley and this is also a very important feature. If the projection surface is located at the tooth top, as the example for the parallel moving tooth structure of the prior art, then it will have many increased failure probabilities as the aforementioned chain being raised too high, and the shortcoming of easily generating noise because of the parallel moving tooth interfering with the chain during normal operation. If the projection surface is located on the sprockets portion wherein is further below the tooth valley, then it will create a structure similar as the prior "convex point". Because there are factors that the convex point profile edge has round arc and the chain blocked by the sprocket is unable to be accurately biased against to the middle upper portion of the convex point, during high load the aforementioned chain is caused to be easily loosened off to make a failure for shifting and a bad circulation result for the convex point being easily worn out would be caused. From these, it can be proved that not only the design for the projection surface 325 of the present invention located at the tooth valley profile and matched with the ~~cutting~~ cut portion is completely different in structure from the parallel moving tooth and convex point for the prior arts, but also the efficiency is further greatly increased.

Paragraph beginning on page 12, at prenumbered line 26, has been amended as follows:

[0027] 3. The cutting portion of the present invention (including the recessed tooth valley 327 and the ~~cutting~~ cut portion 328) all are located at non-force-acting side, and the tooth contour of the left side (pressured side) of each characteristic tooth is still kept the tooth contour curvature for general tooth, during the normal operation for the chain, the chain won't be suspended in the air, so the noise is quite low.

Paragraph beginning on page 12, at prenumbered line 32, has been amended as follows:

[0028] 4. The present invention has arranged with the curve surface 326 and the ~~cutting~~ cut portion 328 at the right side of the first characteristic tooth 321, the recessed tooth valley between the first characteristic tooth 322 and the third characteristic tooth 321, and the recession 321 at the lower portion of the first characteristic tooth, which not only can effectively avoid the occurrence of interference during the chain's chaining-up, but also parts further have the little adjustment for the pitch to reach the efficiency for accurately assistance for chaining-up.